CLAIMS

5 1. Digital filter comprising at least a first and a second delayed summation line, whereby one of the delay lines comprise a warped FIR filter and the other line is a FIR filter, whereby:

- at least two delayed summation lines are present,

- midpoint elements from the first delayed summation line are used as input to the

10 second delayed summation line,

- output from the first delayed summation line are delayed with a delay corresponding to the delay of the second delayed summation line,

- the delayed output from the first delayed summation line is added to the output from the second delayed summation line to form a new output.

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2. Digital filter as claimed in claim 1, whereby the first delayed summation line is a warped summation line and the delay of the output of the first delayed summation line is a simple delay.

20 3. Digital filter as claimed in claim 1, whereby the second delayed summation line is a warped summation line and the delay of the output of the first delayed summation line consists of warped delay elements.

4. Digital filter as claimed in one of the above claims, wherein the warped FIR filter

25 comprises a number of warped filter sections, whereby midpoint elements of each section are used as input for the next section and where further the output of the same sections are delayed for in-phase summation with output from the next section.

5. Listening or sound processing device, which is adapted to receive an input signal and

30 has a signal path from the input to a receiver for delivering a sound signal to the ear of the user, where at least part of the signal path is digital and where the signal path comprises a digital filter as claimed in one of the above claims and where the signal

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path is controlled by a controller changing the characteristics of the signal path when there is a change in the input to the controller.